#### Food Distribution and Preservation

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**Grade Level: 4-6** 

Approximate Length of Activity: One class period

#### **Objectives:**

#### Teacher:

- 1. Make students aware of the different types of transportation used in the distribution of agricultural products.
- 2. Help students write an expository essay explaining the different types of distribution and types of preservations used.

#### Students:

- Become aware of how agricultural products are made available yearround in the United States.
- 2. Know that distribution is the transportation and storage of goods.
- 3. Explain how various types of transportation provide distribution of agricultural products.
- 4. Understand the different methods of preserving foods.
- 5. Write an expository essay explaining the different types of transportation used in the distribution of agricultural products.

### Michigan Content Standards: (Language Arts) 2.1; 3.5; 7.1; 10.1

#### Introduction:

(Be sure that students are aware that agricultural products are grown in different parts of the country. They also need to be aware that some products are grown outside of the United States.)

Distribution is the transportation and storage of goods. Because we have a very complex distribution system, we are able to enjoy a wide variety of quality products. Food is transported from where it is grown to the supermarkets, thanks to various people who work in distribution.

Whether it is to a local processing plant or a distant market, livestock, crops, fruit, turf grass, trees and other agricultural products most often leave their production site on a truck. This would be on a large farm truck or a semi-trailer.

When the initial trip from the farm is complete, the types of transportation begin to change dramatically. Grains are usually moved from the local elevator to a processing plant or an export terminal by railroad car or barge. Products that need to be refrigerated or frozen, such as meat, milk, and vegetables, must travel in special rail cars or trucks with refrigerators to keep them cold. Products that spoil very quickly, such as fresh-cut flowers and fresh seafood, are distributed by airplane.

When food is distributed from where it is grown, it must be preserved. Because of preservation, we can enjoy different foods year-round rather than just at the time they are harvested. Some of the types of preservation are refrigeration, heat, drying, and chemical.

#### Glossary

Export: To send goods out of the U.S. for trade or sale

Import: To bring goods purchased from a foreign country into the U.S.

Preserve: To maintain a product's quality, condition, safety

#### **Materials Needed:**

- "Agricultural Travel" worksheet
- "Food for Keeps" worksheet

#### **Activity Outline:**

- 1. Discuss the background information and the glossary terms with students.
- 2. Hand out the worksheet, "Agricultural Travel" and discuss the ways foods are transported.
- 3. Have the students make a list of food items they purchase at the grocery store. Then have the students identify how each product is transported to the grocery store.
- 4. Hand out the worksheet, "Food for Keeps." Discuss how each one of the foods is preserved so it reaches the grocery store ready for use by the consumer.
- 5. Return to the list generated by the students, and discuss the ways of preserving each of the products.
- 6. Assign an expository essay to each student. The essay should explain the different methods of food distribution and food preservation

#### **Discussion Questions:**

- 1. What are the different methods of transporting products?
- 2. Give examples of what types of products are transported by each method.
- 3. Why are each of these products transported this way?
- 4. What are some of the different methods of preserving foods?
- 5. How do you store various foods at home (i.e. cereal, milk, ice cream, fruit, canned goods)?

#### **Related Activities**

- 1. Write a poem about the different ways that products are distributed.
- 2. Research foods that are distributed and preserved from foreign countries and the ways in which this is done.
- Create a diorama of a product being distributed by one of the forms of transportation discussed.
- 4. "FOODS AMAZING JOURNEY" located in the Language Arts section of the Michigan Farm Bureau Ag in the Classroom on-line lessons.

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## Agricultural Travel

Draw a line from the foods to their most common method of travel.

### Fresh Fish/Flowers



**Wheat, Corn, & Soybeans** 



**Packaged Foods** 



Milk, Fruit, Meat, Vegetables



## **Refrigerated Truck**



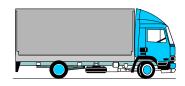
**Airplane** 



Rail Car or River Barge

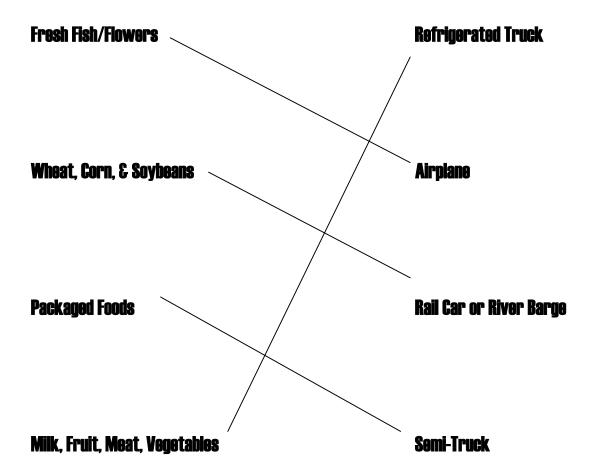


Semi-Truck



## Agricultural Travel

Draw a line from the foods to their most common method of travel.



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Food	Distribution	and Prese	ervation
To be	used with:		

Name			
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# Food for Keeps

Food must be preserved so it will not spoil as it's being moved from one place to another. This picture shows some foods and four ways to preserve them. Write the names of the foods under the picture of the way each is preserved.

Refrigeration	Heat	Drying	Chemical

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# Food for Keeps

Food must be preserved so it will not spoil as it's being moved from one place to another. This picture shows some foods and four ways to preserve them. Write the names of the foods under the picture of the way each is preserved.

Refrigeration	Heat	Drying	Chemical
Jelly	Peas	Pepper	Pickles
Poultry	Tomatoes	Popcorn	Olives
Meat	Olives	Dried Fruit	
Milk	Soup	Meat	
		Milk	

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